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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,262

10/26/2006

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EXAMINER

METZMAIER, DANIEL S

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,262	Applicant(s) MIYAHARA ET AL.	
	Examiner Daniel S. Metzmaier	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/5/2006; 10/26/2007 & 27/2007;.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/27/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-18 are pending.

Priority

1. Receipt is acknowledged of papers received in this national stage application from the International Bureau (PCT Rule 17.2(a)), submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed 27 Oct 2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered. Item 7 of the non-patent literature lacks a date or publication.

Drawings

3. The drawings were received on 26 October 2006 are accepted.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-2, 4-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kao Corp, JP 10-120524 A, as evidenced by the machine translation and the Japanese Patent Abstract Publ. No. 10/120524 (12 May 1998). Kao Corp (Claims) describes a transparent or translucent emulsion cosmetic containing silicone oil having a kinetic viscosity of 10cSt at 25°C (instant claim 1, component (C)), a silicone-based surfactant (instant claim 1, component (B), lipophilic nonionic surfactant) and a polyoxyethylene-addition nonionic surfactant, which is a hydrophilic surfactant (instant claim 1, component (A) hydrophilic nonionic surfactant).

Kao Corp (example 23) describes a translucent cosmetic lotion comprising 1,3-butylene glycol (instant claim 1, component (D), solvent). Since the composition is stable, translucent and comprising silicone oil, the one-phase microemulsion composition is inherent and would inherently satisfy the relative CMC of the claim.

6. Claims 1-3, 7-8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hans Schwarzkopf Gmbh & Co, WO 99/44564. Hans Schwarzkopf Gmbh & Co (abstract) discloses microemulsions having an average droplet size of less than 400 nm (see instant claim 10). Hans Schwarzkopf Gmbh & Co (page 2, lines 7 et seq; page 8, lines 23 et seq) discloses problems of the prior art may be overcome with microemulsions formulated via the phase inversion temperature (PIT) method of emulsion formation.

Hans Schwarzkopf Gmbh & Co (page 25, preparation example 1) discloses compositions reading on the instant claims. Said compositions employ Emulgade® SE, Emulgin® B2 and Glycerol.

Hans Schwarzkopf Gmbh & Co (page 22, lines 10-14) discloses the following components in the examples:

Emulgade® SE – Mixture of partial glycerides, fatty alcohols, fatty alcohol ethoxylates and wax esters (INCI name: Glycerol Stearate (and) Cetereath-20 (and) Cetereath-12 (and) Cetearyl Alcohol (and) Cetyl Palmitate) (HENKEL).

Emulgin® B2 – Cetearyl Alcohol +20 EO (INCI name: Cetereath-20) (HENKEL).

Glycerol Stearate has a HLB value of $\sim 3.8 (\pm 1)$ and Cetereath-20 has a value of $\sim 15.2 (\pm 1)$ (see instant claim 2). A majority of the remaining components constitute the oil phase and sum to a value of greater than 10 % by mass (see instant claim 3).

While Hans Schwarzkopf Gmbh & Co is silent regarding the properties of the relative critical micelle concentrations (CMC) in the water miscible solvent to water, the components are otherwise anticipated. It is reasonable and logical to expect that the properties would be inherent for the materials disclosed in the Hans Schwarzkopf Gmbh & Co reference. More specifically, it is logical to expect a higher CMC in for an amphiphilic compound in solvent that has a lower polarity and increased size relative to water.

Furthermore, the characterization of the compositions as a “one-phase microemulsion” (noted instant paragraphs [0023]-[0024]) would be expected to be inherent since the components are otherwise anticipated and the prior art microemulsions are made by the phase inversion method.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 4-6, 9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hans Schwarzkopf Gmbh & Co, WO 99/44564. Hans Schwarzkopf Gmbh & Co discloses microemulsions made via the PIT method of emulsification as set forth in the above anticipation rejection. Said citations and reasoning set forth in the above anticipation rejection over the same reference are herein incorporated by reference.

Hans Schwarzkopf Gmbh & Co differs from claims 4-5 and 14-15 in the incorporation of silicone oil into the exemplified microemulsions.

Hans Schwarzkopf Gmbh & Co (page 10, lines 3 et seq) discloses a number of active ingredients that may optionally be employed in the microemulsion compositions for their advantageous hair care effect. Hans Schwarzkopf Gmbh & Co page 13, lines 5 et seq) specifically mentions silicone oils including at least dimethylpolysiloxanes and methylphenylpolysiloxanes.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the silicone oils contemplated in the Hans Schwarzkopf Gmbh & Co reference and known to ordinary skilled artisan for their advantageous hair care effect.

Hans Schwarzkopf Gmbh & Co differs from claims 6 and 16 in the concentration of the blending amount of the instantly claimed component (D). The claims set forth not less than 5 % by mass and Hans Schwarzkopf Gmbh & Co exemplifies 5 % of an 86 % glycerol material¹, which equate to 4.3 % of glycerol.

Hans Schwarzkopf Gmbh & Co (pages 11 to 12, lines 26 to 29) discloses the actives may further include plant extracts in pure or dilute form at 2 to 80 % by weight in their extractants or extractant mixture use in their production. These are characterized as (page 12, lines 12 et seq) to include lower alcohols and polyols.

Hans Schwarzkopf Gmbh & Co (page 18, lines 14-15) further teaches the addition of polyhydric alcohols as solubilizers and suggest (page 17, lines 3-6) these are typical ingredients that affect the PIT.

¹ This is understood to be 86 % of glycerol with the other 14 % as water.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to vary the solvent concentration based on the remaining microemulsion components for the advantage of improving the components' solubility and advantageously affect the PIT.

Furthermore, attention is directed to MPEP 2144.05(I) wherein it sets forth, "A *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. ***Titanium Metals Corp. of America v. Banner***, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985)."

Hans Schwarzkopf Gmbh & Co differs from claims 9 and 11² in the incorporation of the glycerol into the oil phase prior to mixing the water to form the microemulsion. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to vary the components as a point of law and attention is directed to MPEP 2144.04(IV)(C). "*In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is *prima facie* obvious.)".

Furthermore and since Hans Schwarzkopf Gmbh & Co mixes the ingredient at above the PIT, the effect of having the polyol in either particular phase being added is not realized.

Comments regarding reference cited in the Written Opinion

10. Example 3 of JP 2003-12492 is also cited with a characterization of the lipophilic nonionic surfactant reading on the sucrose monooleate of the reference example 3.

² Claims 12-18 dependant on claim 11 include the limitations of claim 11 and are here included indirectly.

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This is not agreed since sucrose monooleate has an HLB ~ 14 or 15. Thus the lipophilic nonionic surfactant could not read thereon since an said HLB values are in the hydrophilic range.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Daniel S. Metzmaier/
Primary Examiner, Art Unit 1796**

DSM